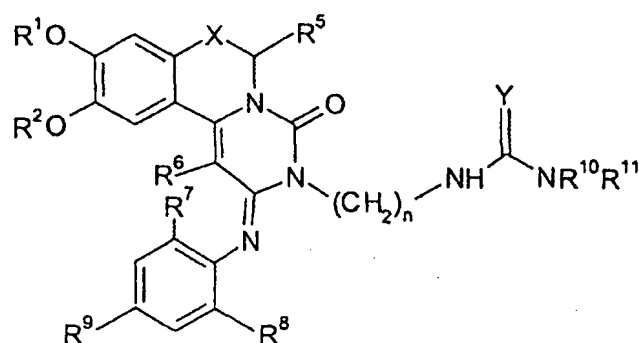


AMENDMENTS TO THE CLAIMS

Claims 1-43 (cancelled).

Claim 44 (currently amended): A method ~~for the treatment of~~ to treat asthma or to cause bronchial dilation in a mammal in need thereof, which method comprises administering to said mammal an effective, non-toxic amount of a compound of formula I:



I

wherein

each of R¹ and R² independently represents a C₁₋₆ alkyl or C₂₋₇ acyl group;

R⁵ represents a hydrogen atom or a C₁₋₃ alkyl, C₂₋₃ alkenyl or C₂₋₃ alkynyl group;

R⁶ represents a hydrogen atom or a C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, amino, C₁₋₆ alkylamino, di(C₁₋₆) alkylamino or C₂₋₇ acylamino group;

each of R⁷ and R⁸ independently represents a hydrogen or halogen atom or a hydroxy, trifluoromethyl, C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₂₋₇ acyl, C₁₋₆ alkylthio, C₁₋₆ alkoxy,

C₃₋₆ cycloalkyl; and

R⁹ represents a hydrogen or halogen atom or a hydroxy, trifluoromethyl, C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₂₋₇ acyl, C₁₋₆ alkylthio, C₁₋₆ alkoxy or C₃₋₆ cycloalkyl group;

X represents a group CR³R⁴, wherein each of R³ and R⁴ independently represents a hydrogen atom or a C₁₋₃ alkyl group;

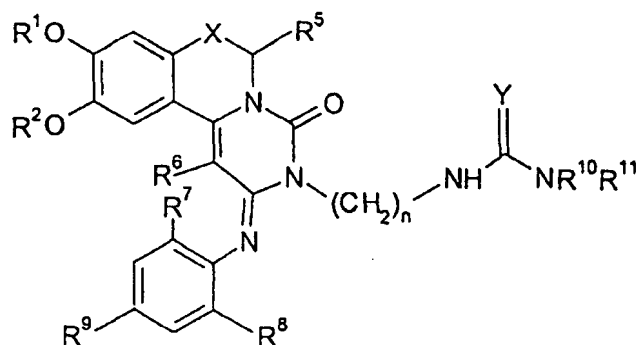
each of R^{10} and R^{11} independently represents a hydrogen atom, a C_{1-3} alkyl, C_{3-6} cycloalkyl or phenyl group;

Y represents an oxygen atom or a group $CHNO_2$, NCN , NH or NNO_2 ;

n is an integer from 2 to 4;

or a salt thereof.

Claim 45 (previously presented): A method for the treatment of chronic obstructive pulmonary disease (COPD) in a mammal, which method comprises administering to said mammal an effective, non-toxic amount of a compound of formula I:



I

wherein

each of R^1 and R^2 independently represents a C_{1-6} alkyl or C_{2-7} acyl group;

R^5 represents a hydrogen atom or a C_{1-3} alkyl, C_{2-3} alkenyl or C_{2-3} alkynyl group;

R^6 represents a hydrogen atom or a C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, amino, C_{1-6} alkylamino, di(C_{1-6}) alkylamino or C_{2-7} acylamino group;

each of R^7 and R^8 independently represents a hydrogen or halogen atom or a hydroxy, trifluoromethyl, C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, C_{2-7} acyl, C_{1-6} alkylthio, C_{1-6} alkoxy,

C_{3-6} cycloalkyl; and

R⁹ represents a hydrogen or halogen atom or a hydroxy, trifluoromethyl, C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₂₋₇ acyl, C₁₋₆ alkylthio, C₁₋₆ alkoxy or C₃₋₆ cycloalkyl group;

X represents a group CR³R⁴, wherein each of R³ and R⁴ independently represents a hydrogen atom or a C₁₋₃ alkyl group;

each of R¹⁰ and R¹¹ independently represents a hydrogen atom, a C₁₋₃ alkyl, C₃₋₆ cycloalkyl or phenyl group;

Y represents an oxygen atom or a group CHNO₂, NCN, NH or NNO₂;

n is an integer from 2 to 4;

or a salt thereof.

Claim 46 (currently amended): A method as claimed in any one of claims-43, 44, or 45, wherein independently or in any compatible combination:

each of R¹ and R² independently represent a C₁₋₆ alkyl;

each of R³ and R⁴ represents a hydrogen atom;

R⁵ represents a hydrogen atom;

R⁶ represents a hydrogen atom;

each of R⁷ and R⁸ independently represent a C₁₋₆ alkyl;

R⁹ represents a halogen atom or a methyl or acetyl group;

Y represents an oxygen atom or a group CHNO₂; and

n is 2.

Claim 47 (currently amended): A method as claimed in any one of claims 43 to 44 or 45, wherein the compound is administered by aerosol.

Claim 48 (currently amended): A method as claimed in any one of claims-43 to 44 or 45, wherein the mammal is a human.

Claims 49-50 (cancelled).

Claim 51 (currently amended): A method as claimed in any one of claims ~~43 to 44~~ or 45, wherein each of R¹ and R² represents a C₁₋₄ alkyl group; and each of R⁷ and R⁸ represents a methyl, ethyl or isopropyl group.

Claim 52 (currently amended): A method as claimed in any one of claims ~~43 to 44~~ or 45, wherein the compound of general formula I is selected from the group consisting of:

9,10-Dimethoxy-2-(2,4,6-trimethylphenylimino)-3-(*N*-carbamoyl-2-aminoethyl)-3,4,6,7-tetrahydro-2*H*-pyrimido[6,1-*a*]isoquinolin-4-one;

9,10-Dimethoxy-2-(2,4,6-trimethylphenylimino)-3-[*N*-(*N'*-isopropylcarbamoyl)-2-aminoethyl]-3,4,6,7-tetrahydro-2*H*-pyrimido[6,1-*a*]isoquinolin-4-one;

9,10-Dimethoxy-2-(2,4,6-trimethylphenylimino)-3-[*N*-[1-(*N'*-methyl-2-nitroethenamine)]-2-aminoethyl]-3,4,6,7-tetrahydro-2*H*-pyrimido[6,1-*a*]isoquinolin-4-one;

9,10-Dimethoxy-2-(2,4,6-trimethylphenylimino)-3-[*N*-[1-(*N'*-isopropyl-2-nitroethenamine)]-2-aminoethyl]-3,4,6,7-tetrahydro-2*H*-pyrimido[6,1-*a*]isoquinolin-4-one;

9,10-Dimethoxy-2-(2,4,6-trimethylphenylimino)-3-[*N*-[1-(*N'*, *N'*-dimethyl-2-nitroethenamine)]-2-aminoethyl]-3,4,6,7-tetrahydro-2*H*-pyrimido[6,1-*a*]isoquinolin-4-one;

9,10-Dimethoxy-2-(2,4,6-trimethylphenylimino)-3-[*N*-(*N'*-phenylcarbamoyl)-2-aminoethyl]-3,4,6,7-tetrahydro-2*H*-pyrimido[6,1-*a*]isoquinolin-2-one;

9, 10-Dimethoxy-3-[2-guanidinoethyl]-2-(2,4,6-trimethylphenylimino)-3,4,6,7-tetrahydro-2*H*-pyrimido[6,1-*a*]isoquinolin-4-one;

9,10-Dimethoxy-3-[*N*-(*N'*-nitro)-2-guanidinoethyl]-2-(2,4,6-trimethylphenylimino)-3,4,6,7-tetrahydro-2*H*-pyrimido[6,1-*a*]isoquinolin-4-one;

3-[*N*-(*N'*-Cyclohexylcarbamoyl)-2-aminoethyl]-9,10-dimethoxy-2-(2,4,6-trimethylphenylimino)-3,4,6,7-tetrahydro-2*H*-pyrimido[6,1-*a*]isoquinolin-4-one;

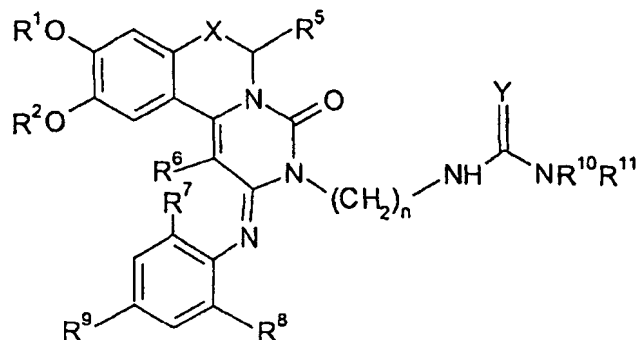
3-(*N*-Carbamoyl-2-aminoethyl)-9,10-dimethoxy-2-(2-methylphenylimino)-3,4,6,7-tetrahydro-2*H*-pyrimido[6,1-*a*]isoquinolin-4-one;

3-(*N*-Carbamoyl-2-aminoethyl)-2-(2,6-diisopropylphenylimino)-9,10-dimethoxy-3,4,6,7-tetrahydro-2*H*-pyrimido[6,1-*a*]isoquinolin-4-one;

3-(*N*-Carbamoyl-4-aminobutyl)-9,10-dimethoxy-2-(2,4,6-trimethylphenylimino)-3,4,6,7-tetrahydro-2*H*-pyrimido[6,1-*a*]isoquinolin-4-one; and

3-[*N*-(*N'*-Cyano-*N''*-methyl)-2-guanidinoethyl]-9,10-dimethoxy-2-(2,4,6-trimethyl-phenylimino)- 3,4,6,7-tetrahydro-2*H*-pyrimido[6,1-*a*]isoquinolin-4-one.

Claim 53 (currently amended): A method of treating a respiratory disorder in a mammal in need of a smooth muscle relaxant and/or an anti-inflammatory compound, comprising administering to a subject an effective, non-toxic amount of a compound of formula I:



I

wherein

each of R^1 and R^2 independently represents a C_{1-6} alkyl or C_{2-7} acyl group;

R^5 represents a hydrogen atom or a C_{1-3} alkyl, C_{2-3} alkenyl or C_{2-3} alkynyl group;

R^6 represents a hydrogen atom or a C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, amino, C_{1-6} alkylamino, di(C_{1-6}) alkylamino or C_{2-7} acylamino group;

each of R^7 and R^8 independently represents a hydrogen or halogen atom or a hydroxy, trifluoromethyl, C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, C_{2-7} acyl, C_{1-6} alkylthio, C_{1-6} alkoxy,

C_{3-6} cycloalkyl; and

R^9 represents a hydrogen or halogen atom or a hydroxy, trifluoromethyl, C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, C_{2-7} acyl, C_{1-6} alkylthio, C_{1-6} alkoxy or C_{3-6} cycloalkyl group;

X represents a group CR^3R^4 , wherein each of R^3 and R^4 independently represents a hydrogen atom or a C_{1-3} alkyl group;

each of R^{10} and R^{11} independently represents a hydrogen atom, a C_{1-3} alkyl, C_{3-6} cycloalkyl or phenyl group;

Y represents an oxygen atom or a group $CHNO_2$, NCN , NH or NNO_2 ;

n is an integer from 2 to 4;

or a salt thereof, and

wherein the respiratory disorder is selected from the group consisting of allergic asthma, hay fever, allergic rhinitis, bronchitis, cystic fibrosis, and adult respiratory distress syndrome (ARDS).

Claim 54 (cancelled).

Claim 55 (currently amended): The method of claim ~~54~~ 53, wherein the respiratory disorder is selected from the group consisting of ~~asthma, allergic asthma, hay fever, and allergic rhinitis, bronchitis, chronic obstructive pulmonary disease (COPD), adult respiratory distress syndrome (ARDS), and cystic fibrosis.~~

Claims 56-63 (cancelled).